November 10, 2020 Reference No. 11208393-111

Mr. Robert Thompson
Remedial Project Manager
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Mail Code SR-6J
Chicago, Illinois
60604

Ms. Tamara McPeek
Environmental Response and Revitalization
Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, Ohio
45402

Mr. Steve Renninger
On-Scene Coordinator
United States Environmental Protection Agency
Region V
Emergency Response Branch
26 West Martin Luther King Drive
Cincinnati, Ohio
45268

Dear Mr. Thompson, Ms. McPeek, and Mr. Renninger:

Re: Progress Report: October 1 through 31, 2020
South Dayton Dump and Landfill Site, Moraine, Ohio (Site)

This Monthly Progress Report is submitted in accordance with the Administrative Settlement and Order on Consent (ASAOC) for Remedial Investigation/Feasibility Study (RI/FS) Proceeding Under Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. §§ 9604, 9607, and 9622 (United States Environmental Protection Agency [U.S. EPA]) Docket No. V-W-16-C-011) effective June 11, 2016 (RI/FS ASAOC), and the ASAOC for Removal Action Proceeding Under Sections 104, 106(a), 107, and 122 of the CERCLA, 42 U.S.C. §§ 9604, 9606(a), 9607, and 9622 U.S. EPA Docket No. V-W-13-C-010, effective April 8, 2013 (Removal Action ASAOC), for the period of October 1 through 31, 2020.

The next Progress Report for the month of November 2020 will be submitted on or before December 10, 2020.

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Significant Developments in this Reporting Period

RI/FS ASAOC Developments

Activities conducted in October 2020 are summarized below:

- The following soil gas investigation activities were completed:
  - Field parameter monitoring for carbon dioxide, carbon monoxide, oxygen, explosive gases/methane, hydrogen sulfide, and organic vapors was conducted at 35 GHD soil gas probe locations and five U.S. EPA soil gas probe locations. Explosive gas readings above the lower explosive limit (LEL) for methane were recorded at the following locations: GP01-18, GP02-09, and GP28-18. A summary of field parameter monitoring data is provided in Table 1 and existing soil gas probe locations are shown on Figure 1.
  - Two U.S. EPA soil gas probe locations (GP-2 and GP-3) were not monitored. One U.S. EPA soil gas probe location (GP-2) located adjacent to the DP&L transportation building and former UST area was not included in the field monitoring program based on U.S. EPA approval of GHD's Technical Report: GP-2 Methane Monitoring Summary & Assessment, South Dayton Dump and Landfill Site and Revision 1, Addendum 2 of the VI Mitigation Work Plan, provided on December 12, 2016. The other location (GP-3) could not be located in the field.
  - Soil gas probe sampling for VOC analysis by TO-15 was conducted at 21 GHD soil gas probe locations and one U.S. EPA soil gas probe location. The samples were collected from September 30 to October 16, at the locations identified on Table 1. Laboratory results are due in November 2020.
- The following groundwater investigation activities were completed:
  - Water level measurements were recorded at 51 existing monitoring well locations. Monitoring locations are shown in Figure 2 and groundwater elevations are provided in Table 2.
  - Groundwater samples were collected from 30 monitoring wells between October 21 and October 30, 2020 as follows.
    - MW-202, MW-208, MW-215A, MW-237B on October 21, 2020
    - MW-226, MW-247, MW-207, MW-206, MW-103, MW-102 on October 22, 2020
    - MW-248, MW-218A, MW-218B, MW-234 on October 23, 2020
    - MW-222, MW-222A, MW-224A, MW-224B on October 26, 2020
    - MW-221, MW-223A, MW-223B on October 27, 2020
    - MW-214, MW-243, MW-230, MW-246, MW-242, MW-225 on October 28, 2020
    - MW-209A, MW-212, MW-210B on October 30, 2020
  - Thirty groundwater samples (plus three field duplicates, two rinse blanks. 1 MS/MSD, and seven trip blanks) were collected from 30 monitoring wells and submitted to Eurofins for laboratory analysis of volatile organic compounds (VOCs) (including 1,2-Dibromo-3-chloropropane and 1,2-Dibromoethane), semi-volatile organic compounds (SVOCs), metals (total and dissolved) and cyanide, and major anions (chloride, sulfate, nitrite, nitrate).

- Nine groundwater samples (plus one field duplicate and two trip blanks) were collected from nine monitoring wells and submitted to Eurofins for laboratory analysis of 1,4-dioxane.
- Six monitoring wells (MW-202, MW-208, MW-215A, MW-237B, MW-226, and MW-246) that were initially sampled on October 21/22 were resampled for 1,4-dioxane on October 30, 2020, due to an oversight regarding sample container requirements. Six groundwater samples (plus one field duplicate, one rinse blank, and one trip blank) were collected and submitted to Eurofins for laboratory analysis of 1,4-dioxane.
- One location (MW-201) was damaged and could not be sampled. The well riser and protective casing at this location is bent and will require repair before sampling can be completed.

- On October 16, 2020 U.S. EPA provided GHD with conditional approval of the draft Quality Assurance Project Plan (QAPP) and list of preliminary comments to be addressed in ensure a complete sampling design for the emerging contaminants in groundwater.
- On October 21, 2020 GHD provided U.S. EPA with an updated draft QAPP based on the October 16, 2020 preliminary comments, via electronic link for download.
- On October 21, 2020 GHD provided information to the agencies regarding proposed off-site disposal of investigation derived waste (IDW) including non-hazardous wastewater from groundwater investigation activities stored in the on-site frac tank. GHD proposed the use of Clean Water Environmental located at 300 Cherokee Drive, Dayton, Ohio.
- On October 22, 2020, U.S. EPA notified GHD that Clean Water Environmental – Dayton, Ohio (OHD 004 274 031) is acceptable to receive waste regulated by the CERCLA Off-site Rule.
- On October 23, 2020, U.S. EPA provided GHD with the final QAPP review comments.
- On October 24, 2020, U.S. EPA notified GHD that the response to comments (RTC) and revised Floodplain Soil Investigation – Sampling Results letters, dated September 29, 2020, adequately addressed U.S. EPA comment letter dated August 4, 2020.

Removal Action ASAOC Developments

On October 15, 2020, GHD provided a letter summary of vapor intrusion sampling results to owners/tenants at Buildings 8 and 9 – B&G Equipment and Truck Repair, Building 12 – Overstreet Painting and S&J Precision, Building 15 – SIM Trainer, Building 17 – D. Dickinson Construction (formerly Megacity Construction), and Building 24 – Globe Manufacturing. A letter summary of vapor intrusion sampling results was provided to the owner/tenants at Building 14 – NexGen Vending on October 20, 2020.

On October 15, 2020, GHD was notified by Mr. Mark Fornes (as property owner representative) of the intended sale of some of the Dryden Road business properties, to be completed in November 2020.

On October 22, 2020, U.S. EPA requested information regarding the status of GHD's response to U.S. EPA's request regarding sub-slab and indoor air sampling results dated April 8, 2020. GHD is in process of assessing the vapor intrusion monitoring results in comparison to current VISLs as requested.

Summaries of all Anticipated Problems and Planned Resolutions

No difficulties/delays were encountered during this reporting period. However, the COVID-19 pandemic and requirements for physical/social distancing, isolation, and quarantine could cause future temporary or long-term equipment, supply and/or personnel availability issues that could affect the project schedule. Federal, state and local orders, as well as guidance from the Centers for Disease Control and Prevention, will be reviewed and followed before any field work or in-person meetings are conducted. We will keep U.S. EPA informed of any potential issues as the COVID-19 pandemic continues to develop and change.

Projected Work for the Next Reporting Period

- GHD will continue planning and scheduling RI/FS activities in accordance with the approved work plan. The planned activities include:
  - Continue discussions with property owners in order to complete field activities related to monitoring well installation and soil gas probe installation.
  - Review U.S. EPA comments dated April 4 (related to soil/fill and soil gas investigation), August 11 (related to the RAAD), September 9 (related to the Quarry Pond investigation), and October 24 (related to the Quality Assurance Project Plan update).
  - Commence data validation on the analytical results (when received) for the TO-15 soil gas samples collected in October 2020.
  - Continue groundwater sampling activities from specified monitoring well locations and initiate repairs for MW-201.
- The Respondents and U.S. EPA On-Scene Coordinator will continue to work together to implement the VI mitigation work plan.

Should you have any questions on the above, please do not hesitate to contact us.

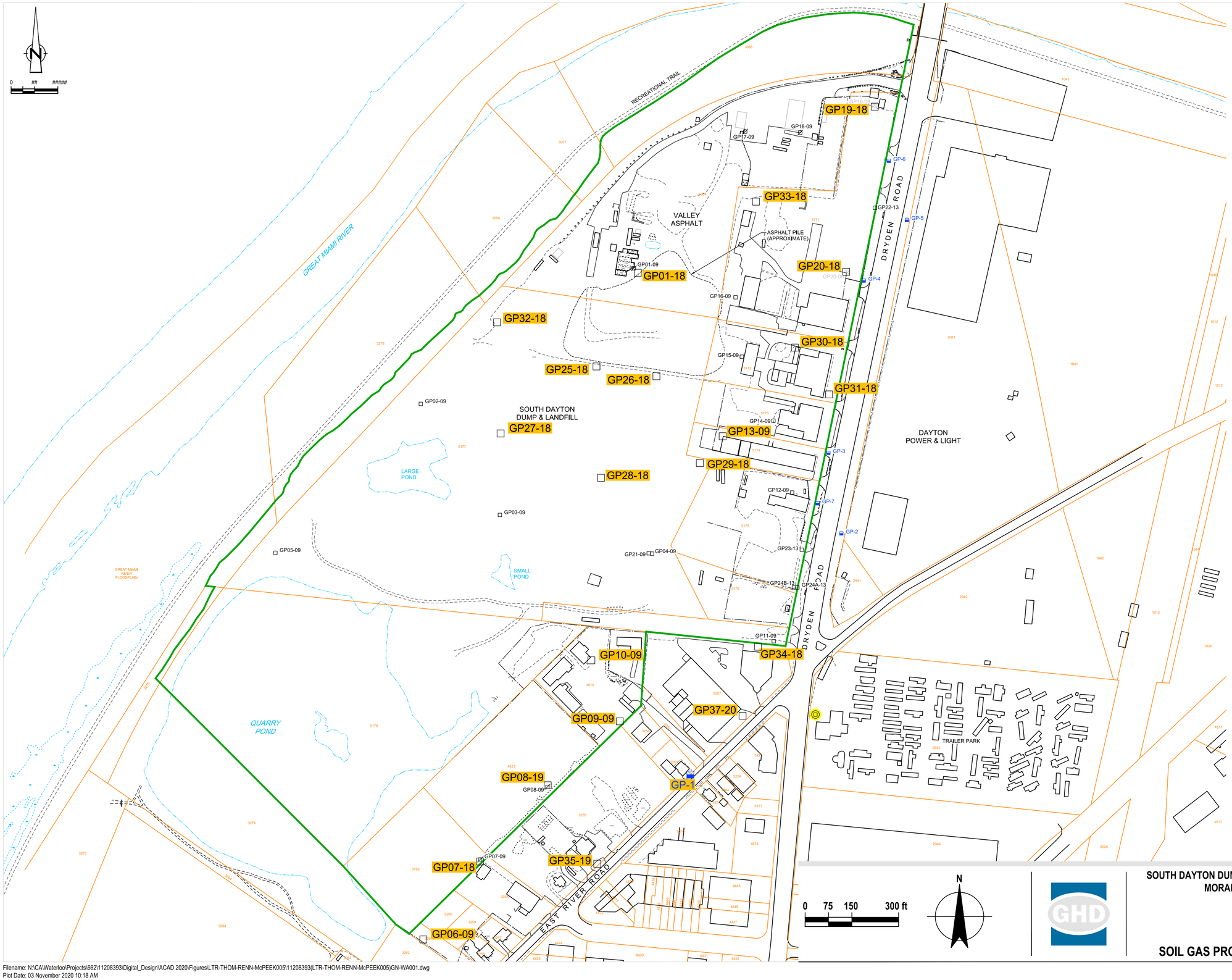
Sincerely,

GHD

Julian Hayward

JH/kf/5

cc: (all by pdf) Ken Brown, ITW
Bryan Heath, NCR
Wendell Barner, Barner Consulting
Jim Campbell, EMI
Andrew Dorn, ITW
Scott Blackhurst, Kelsey Hayes Company
Michael Hughes, Neal, Gerber & Eisenberg
Wray Blattner, Thompson Hine
Larry Silver, Langsam Stevens Silver & Hollaender
Tim Hoffman, Dinsmore & Shohl
Sally Scott, Jacobs
Valerie Chan, GHD



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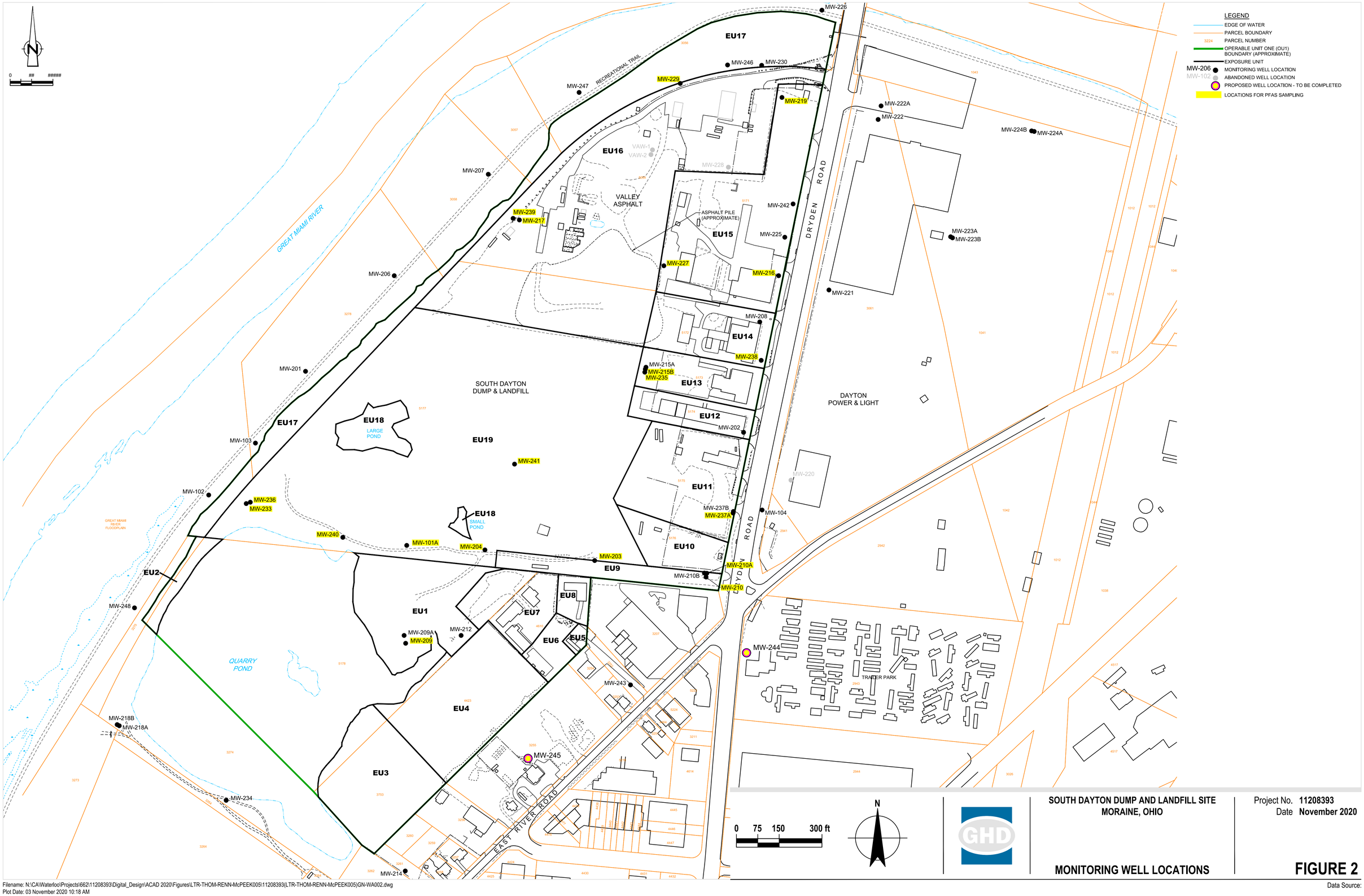

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GHD

SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Project No. **11208393**
Date **November 2020**

MONITORING WELL LOCATIONS

FIGURE 2

Data Source:

Soil Gas Probes - Field Parameters - October 2020
South Dayton Dump Landfill
Moraine, Ohio

		Field Parameters									
Location	**Date**	**Pressure (in WC)**	**CO_2 % v/v**	**CO ppm**	**O_2 % v/v**	**LEL (Unfiltered) %**	**LEL (Filtered) %**	**Methane (Unfiltered) % v/v**	**Methane (Filtered) % v/v**	**H_2S (ppm)**	**VOC (ppm)**
GP01-18	9/30/2020	0.01243	15.7	0.0	20.9	>100	>100	32.2	31.7	0.0	0.0
GP02-09	10/1/2020	-0.0294	15.9	0.0	13.0	>100	>100	13.7	13.6	0.0	0.0
GP03-09	10/1/2020	0.00038	3.0	0.0	18.7	0.0	0.0	0.0	0.0	0.0	0.0
GP04-09	9/30/2020	-0.00546	1.4	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0
GP05-09	10/1/2020	-0.00236	11.0	0.0	19.5	0.0	0.0	0.0	0.0	0.0	0.0
GP06-09	10/1/2020	-0.0002	4.8	0.0	19.5	0.0	0.0	0.0	0.0	0.0	0.0
GP07-18	10/1/2020	0.00366	13.8	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0
GP08-18	10/1/2020	0.0283	16.8	0.0	20.9	26.0	25.0	1.3	1.2	0.0	0.1
GP09-09	9/30/2020	n/a	6.3	0.0	17.9	0.0	0.0	0.0	0.0	0.0	0.0
GP10-09	10/2/2020	0.00323	4.6	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0
GP11-09	9/30/2020	-0.00232	6.0	0.0	19.2	0.0	0.0	0.0	0.0	0.0	0.0
GP12-09	9/30/2020	-0.00813	0.7	0.0	20.4	0.0	0.0	0.0	0.0	0.0	0.0
GP13-09	9/30/2020	0.00395	15.6	0.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0
GP14-09	9/30/2020	-0.0483	3.5	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0
GP15-09	9/30/2020	-0.01237	6.1	0.0	18.9	0.0	0.0	0.0	0.0	0.0	0.0
GP16-09	9/30/2020	0.00926	10.9	0.0	15.4	6.0	6.0	0.3	0.3	0.0	0.0
GP19-18	9/30/2020	0.164	12.7	0.0	18.1	2.0	0.0	0.3	0.5	0.0	0.0
GP20-18	9/30/2020	0.01917	12.5	0.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
GP21-09	9/30/2020	-0.00252	2.1	0.0	18.6	10.0	10.0	0.5	0.5	0.0	0.0
GP22-13	10/2/2020	0.001325	10.6	0.0	20.9	2.0	2.0	0.1	0.1	0.0	0.0
GP23-13	9/30/2020	0.00374	8.7	0.0	17.9	0.0	0.0	0.0	0.0	0.0	0.0
GP24A-13	9/30/2020	0.0221	13.2	0.0	16.6	0.0	0.0	0.0	0.0	0.0	0.0
GP24B-13	9/30/2020	0.0024	6.4	0.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0
GP25-18	10/1/2020	-0.00424	5.2	0.0	15.9	74.0	72.0	3.7	3.6	0.0	0.0
GP26-18	10/1/2020	0.00336	13.7	0.0	15.3	39.0	37.0	1.9	1.8	0.0	0.1
GP27-18	10/1/2020	0.00097	9.3	0.0	14.4	9.0	9.0	0.4	0.4	0.0	2.0
GP28-18	10/1/2020	0.00086	5.5	0.0	14.3	>100	>100	6.2	5.8	0.0	0.4
GP29-18	10/1/2020	-0.00827	6.4	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0
GP30-18	9/30/2020	0.02350	0.0	0.0	20.7	0.0	0.0	0.0	0.0	0.0	0.0
GP31-18	9/30/2020	-0.315	2.3	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0
GP32-18	10/1/2020	0.00320	17.3	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0
GP33-18	9/30/2020	0.0217	14.7	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0
GP34-18	10/1/2020	-0.00422	9.7	0.0	18.3	0.0	0.0	0.0	0.0	0.0	0.0
GP35-19	10/2/2020	-0.00374	4.1	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0
GP37-20	10/1/2020	-0.00001	2.3	0.0	20.1	0.0	0.0	0.0	0.0	0.0	0.1
USEPA GP-1 North	9/30/2020	0.0544	0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-1 Middle		-0.01066	1.4	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-1 South		0.0781	2.9	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0
	10/5/2020	Insufficient gas flow. No readings.									
		-0.0014	1.8	4.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0
		-0.00397	3.6	3.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-2		Excluded from Field Parameter Montoring									
USEPA GP-3 North USEPA GP-3 SW USEPA GP-3 SE		Probe could not be located. No readings.									
USEPA GP-4 North	9/29/2020	0.01599	7.6	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-4 Middle		0.00598	8.0	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-4 South		0.00975	7.7	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-5 North USEPA GP-5 South	9/29/2020	0.00120	6.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-6 North	9/29/2020	0.01623	8.2	0.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-6 Middle		0.00016	9.4	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-6 South		-0.00501	11.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-7 West	9/29/2020	0.0165	8.1	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-7 Middle		0.00972	6.9	0.0	12.8	0.0	0.0	0.0	0.0	0.0	0.0
USEPA GP-7 East		-0.00477	5.7	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0

CO_2	Carbon Dioxide
O_2	Oxygen
LEL	Lower Explosive Limit
H_2S	Hydrogen Sulfide
VOC	Volatile Organic Compounds
% v/v	Percent by Volume
in WC	Inches Water Column

	Barmoetric Pressure (inches Hg)	Temperature (^{o}F)
9/30/2020	29.80	52
10/01/2020	29.99	50
10/02/2020	30.17	44
10/05/2020	30.31	45

Groundwater Elevation Data (October 2020)
South Dayton Dump Landfill
Moraine, Ohio

Location	Coordinates[1]		October 2020		Aquifer
	Easting	Northing	Depth to Water ft BREF	Groundwater Elevation ft AMSL	
MW-101A	1484347.13	633062.05	16.90	708.10	**UA**
MW-102	1483652.72	633238.74	9.88	707.75	**UA**
MW-103	1483816.63	633420.79	8.69	707.81	**UA**
MW-201	1483992.29	633672.43	7.75	707.50	**UA**
MW-202	1485528.31	633458.42	24.67	708.41	**UA**
MW-203	1485006.23	633009.04	26.21**	703.90**	**UA**
MW-204	1484621.37	633046.28	14.22	708.47	**UA**
MW-206	1484303.39	634007.63	8.05	708.03	**UA**
MW-207	1484633.10	634363.27	7.93	708.40	**UA**
MW-208	1485584.91	633845.40	25.43	708.44	**UA**
MW-209	1484343.34	632718.83	6.00	708.26	**UA**
MW-209A	1484337.98	632746.34	6.38	708.26	**LA**
MW-210	1485396.75	632951.11	23.95	708.55	**UA**
MW-210A	1485399.45	632964.36	25.37	708.17	**LA**
MW-210B	1485390.92	632965.07	25.41	708.24	**LA**
MW-212	1484537.84	632746.38	20.57	708.26	**UA**
MW-214	1484342.04	631920.50	15.51	708.45	**LA**
MW-215A	1485186.15	633686.53	26.23	708.40	**UA**
MW-215B	1485183.69	633679.69	26.42	708.27	**LA**
MW-216	1485650.98	634007.80	24.06	708.02	**LA**
MW-217	1484742.27	634203.23	28.49	708.16	**UA**
MW-218A	1483339.09	632429.81	15.00	707.70	**UA**
MW-218B	1483331.81	632433.77	14.80	708.17	**LA**
MW-219	1485662.99	634632.62	27.00	708.34	**UA**
MW-220	1485694.49	633290.82	n/a	n/a	**LA**
MW-221	1485827.65	633957.63	27.87	707.97	**LA**
MW-222	1486000.22	634555.40	28.49	707.77	**LA**
MW-222A	1486010.55	634603.03	26.99	708.43	**UA**
MW-223A	1486254.37	634144.16	26.80	708.58	**UA**
MW-223B	1486261.00	634140.45	27.08	707.96	**LA**
MW-224A	1486547.57	634513.42	27.11	708.49	**UA**
MW-224B	1486538.41	634515.45	27.67	707.81	**LA**
MW-225	1485672.90	634142.60	22.72	708.42	**UA**
MW-226	1485803.06	634938.64	12.88	708.21	**UA**
MW-227	1485248.78	634042.62	30.74	708.36	**UA**
MW-229	1485306.20	634681.80	28.54	708.14	**UA**
MW-230	1485592.00	634745.30	28.99	708.23	**UA**
MW-233	1483784.00	633208.70	22.24	707.84	**UA**
MW-234	1483714.22	632168.22	16.14	707.93	**UA**
MW-235	1485182.31	633669.45	25.74	708.51	**UA**
MW-236	1483798.63	633213.61	21.67	708.39	**LA**
MW-237A	1485491.55	633175.64	21.87	708.65	**LA**
MW-237B	1485492.58	633181.00	22.04	708.40	**LA**
MW-238	1485590.13	633710.91	22.98	708.29	**LA**
MW-239	1484720.15	634208.71	29.41	708.04	**LA**
MW-240	1484123.06	633090.37	12.21	708.28	**UA**
MW-241	1484725.21	633347.05	9.51	708.58	**UA**
MW-242	1485701.95	634259.28	22.76	708.67	**UA**
MW-243	1485131.80	632572.95	19.88	708.65	**UA**
MW-246	1485472.24	634746.59	29.03	708.30	**UA**
MW-247	1484951.62	634650.27	13.92	708.36	**UA**
MW-248	1483392.49	632843.16	5.13	707.76	**UA**
P-211	1484355.17	632855.28	7.13	708.59	**UA**
SG-1 (Small Pond)	1484545.87	633113.90	Dry	n/a	
SG-2 (Large Pond)	1484317.27	633394.10	Dry	n/a	
SG-3 (Quarry Pond North)	1484155.476	632969.253	2.40	707.86***	
SG-4 (Quarry Pond SW)	1483414.065	632461.094	0.02	708.61***	

Notes:

[1] - North American Datum of 1983 (NAD83), U.S. Survey feet
ft BREF - feet below reference
ft AMSL - feet above mean sea level
* Reference point is Top Of Riser at each monitoring well
** Water level is inconsistent with previous measurements
*** Surface water reference points to be confirmed